PATENT ABSTRACTS OF JAPAN

(11)Publication number :   07-137276

(43)Date of publication of application : 30.05.1995

(51)Int.Cl.   B41J 2/175

(21)Application number : 05-159492

(22)Date of filing :   29.06.1993
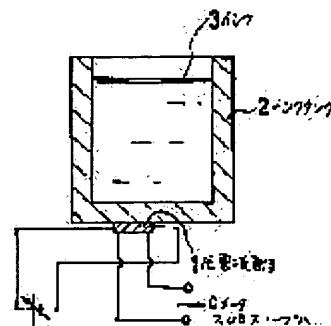
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(54) INK JET RECORDER

(57)Abstract:

PURPOSE: To detect an ink holding amount in an ink tank by providing holding amount detecting means for detecting an electric signal of a piezoelectric vibra tor mounted in the tank or its variation amount of detect the ink holding am ount in the tank.

CONSTITUTION: A piezoelectric vibrator 1 utilizes so-called secondary piezoelectric effect generated when a strain occurs by applying an electric field to a certain ionic crystal. If an ink tank 2 contains a predetermined quantity of ink 3, they have predetermined natural frequencies. When a voltage is varied to approximate a frequency of the vibrator to the natural frequency of the tank 2, it is resonated. When this resonation is detected by a Q meter, etc., a quantity of the ink 3 can be detected. The natural frequency of each vibration system is varied according to the quantity of the ink 3 in the tank 2. Generally, the less the quantity of the ink 3 is, the higher the natural frequency becomes. When correlation between the resonance of the meter and the ink amount by monitoring a frequency at the time of resonance is obtained, the tank 2 interior can be arbitrarily monitored.

LEGAL STATUS

[Date of request for examination]

[Date of sending the examiner's decision of rejection]

[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]

[Date of final disposal for application]

[Patent number]

[Date of registration]

[Number of appeal against examiner's decision of
rejection]
[Date of requesting appeal against examiner's decision
of rejection]
[Date of extinction of right]